

IN THE CLAIMS

Claims 1-15 (cancelled)

Claim 16 (withdrawn)

Claim 17 (cancelled)

Claim 18 (previously presented): A method of manufacturing a flex circuit on a flexible base polymer film including the steps of:

a) superimposing on said film an embossing tool having raised areas comprising a pattern of conductors and vias corresponding to a circuit design, wherein, said raised areas are coated with a thin layer of metal, comprising copper,

b) applying heat and pressure to simultaneously emboss the film and to transfer said thin metal layer from the embossing tool to the polymer film,

c) removing the embossing tool,

d) embossing a pattern corresponding to that of the second surface of a flex circuit, and simultaneously transferring a thin layer of metal into the embossed pattern,

e) physically removing the embossing tool,

f) plating a layer of copper to fill the vias and conductor patterns on both sides of the film,

g) plating a layer of nickel and gold onto the exposed copper patterns, and

h) applying a solder mask on the surface of the film surrounding the solder ball contact pads.

Claims 19 and 20 (cancelled)

Claim 21 (currently amended): A method of manufacturing a flex circuit on a flexible base polymer film including the steps of:

do not enter 4/14/04

- a) positioning adjacent to said film ~~an~~ a single embossing tool having raised areas comprising a pattern of conductors and vias corresponding to a circuit design, wherein said raised areas are coated with a thin layer of metal;
- b) applying heat and pressure on said tool to simultaneously emboss the film and to transfer said thin metal layer from the embossing tool to the polymer film; and
- c) plating a second layer of metal on said transferred thin metal layer.

Claim 22 (previously presented): The method of Claim 21, wherein said thin layer of metal is copper.

Claim 23 (previously presented): The method of Claim 21, wherein said second layer of metal is copper.

Claim 24 (previously presented): The method of Claim 21, comprising the step of plating at least one additional layer on said second layer of metal.

Claim 25 (previously presented): The method of Claim 21, wherein said steps a), b) and c) are performed on two surfaces of said film.